Montana Fish, Wildlife & Parks

2300 Lake Elmo Drive
Billings MT 59105

May 31, 2014

Dear Future Fisheries Board Members,

Thank-you for your service on the Future Fisheries Board and aiding aquatic resources in Montana. Included in this grant application for the Deadmans Diversion Fishway is: a 90% completion report produced by Morrison Maierle, Inc for engineering and design of the entire project which includes a map, plans, and drawings, pages 21 to 24 specifically address the fishway, several photos of the brown trout fishery above and below and 2014 images of high water in March and lower water in April, a letter of support from the Deadmans Basin Water Users Association, evidence of support from the MTDNRC by minutes of a kick-off meeting this past winter, a letter in response to the EA for the diversion work from Trout Unlimited to MTDNRC which requested more detailed information but supported the goals of the project to improve fish passage and instream flow, (Doug Haacke through email approved the use of the EA letter for this application), and the detailed budget for the entire project. The budget can also be found as the final appendix to the 90% completion report for the project.

The Musselshell Watershed Coalition MWC has very effectively worked to improve conditions in the basin. As a direct result of those efforts this group has come together to improve conditions for fish. It has been a privilege and pleasure to work with others in the Musselshell River basin as part of the MWC and for Montana Fish Wildlife and Parks. This is a large project that will meet many users needs such as irrigators, Deadmans Basin recreationalists, but also river fisheries, and river floaters. Funding will not only help this project through completion but will demonstrate good efforts are worthy of support and may lead to more improvements with other projects. I look forward to meeting you at the next meeting to provide additional information and to answer any questions you may have about this opportunity.

Thank-you for your review and time.

Sincerely,

Mike Ruggles
Montana Fish Wildlife and Parks
2300 Lake Elmo Drive
Billings, MT 59105
Phone 247-2963
Email mikeruggles@mt.gov

FUTURE FISHERIES IMPROVEMENT PROGRAM
GRANT APPLICATION
(please fill in the highlighted areas)

I. APPLICANT INFORMATION

A. Applicant Name: Montana Fish Wildlife and Parks

B. Mailing Address: 2300 Lake Elmo Drive

C. City: Billings State: MT Zip: 59105

Telephone: 406-247-2963

D. Contact Person: Mike Ruggles

Address if different from Applicant: Same as above

City: State: Zip:

Telephone:

E. Landowner and/or Lessee Name (if other than Applicant): Montana Department of Natural Resources/Dan Deutsch lead. And Deadmans Basin Water Users Association/ Teri Hice lead.

Mailing Address: 1424 9th Avenue (DNRC) /125 Autumn Road (DMBWUA)

City: Helena/ Roundup State: MT Zip: 59601/59072

Telephone: 406-444-5775/406-323-3533

II. PROJECT INFORMATION*

A. Project Name: Deadmans Basin Diversion Dam Fishway

River, stream, or lake: Musselshell River

Location: Township 7N Range 17E Section 8SWNW

County: Wheatland

B. Purpose of Project:

Improve fish passage and reduce river loss to irrigation canal by leaking structure.

C. Brief Project Description:

The diversion dam was originally constructed in 1941 through a joint effort between Deadmans Basin Water Project, Work Projects Administration, and the Montana Water Conservation Board it was not built with fish passage and has been a significant partial barrier since it was installed. The structure is currently owned by MTDNRC and operated by the Deadmans Basin Water User's Association (DMBWUA). The Musselshell River flood in 2011 significantly damaged the diversion and its already deteriorating structure had been difficult to operate. The diversion dam and canal headgates have been leaking water to the canal consequently reducing instream flow when not necessary by approximately 3,000 acre-feet annually. The boards used to build head on the dam are difficult to place and remove leading to decreased fish passage for extended periods of time. Funds were secured to repair and update the structure. A decision was made by DNRC and DMBWUA to incorporate a fish passage structure. Both groups have a financial investment in the project and would like to have other potential partners share in the cost of the fishway. This grant request, if provided, would help cost share this important component of the project. Additional funding for the entire project will come from FEMA, MTDNRC by Renewable Resource Grant Funds (RRGL), and Reclamation and Development Grant Funds (RDGP), and other MTDNRC funds through the State Water Projects Bureau, and DBWUA.

D. Length of stream or size of lake that will be treated: At river mile 289 this is the only substantial barrier in the upper main stem Musselshell River. This could influence 52 miles upstream with fish passage, and 39 miles downstream of cold/coolwater fisheries with improved passage and flows. Deadmans water returns come in with Careless creek 39 miles downstream. The effects could go beyond during periods when Deadmans Basin isn't delivering water downstream.

E. Project Budget:

Grant Request (Dollars): **$ 50,000**

Contribution by Applicant (Dollars): $ 14,000 by DMWUA for grouted rock In-kind $
(salaries of government employees are not considered as matching contributions)

Contribution from other Sources (Dollars): $ 693,942 In-kind $
(attach verification - See page 2 budget template)

Total Project Cost: **$ 757,942**

F. Attach itemized (line item) budget – see template

G. Attach specific project plans, detailed sketches, plan views, photographs, maps, evidence of landowner consent, evidence of public support, and/or other information necessary to evaluate the merits of the project. If project involves water leasing or water salvage complete supplemental questionnaire (fwp.mt.gov/habitat/futurefisheries/supplement2.doc).

H. Attach land management and maintenance plans that will ensure protection of the reclaimed area.

III. PROJECT BENEFITS*

A. What species of fish will benefit from this project?:

Brown trout, northern redbelly dace, Northern redbelly x finscale dace hybrid, brassy minnow, flathead chub, lake chub, longnose dace, longnose sucker, white sucker, mountain sucker, shorthead redhorse, mountain whitefish, stonecat, western silvery/plains minnow, and common carp would benefit from either or both improved passage and instream flow.

B. How will the project protect or enhance wild fish habitat?:

This project will create passage where passage has been limiting for times other than high water since 1941. This project will allow DMBWUA to better control water and prevent unnecessary water from entering the canal which could improve in-stream flow conditions below the diversion. This area is one of the most critically dewatered sections of the Musselshell.

C. Will the project improve fish populations and/or fishing? To what extent?:

It is expected brown trout populations would improve downstream and upstream of the project. Passage would allow trout and other cold water fish to move upstream to avoid low water and warm water conditions. The native fish would also benefit from passage as they seek refuge and improved in-stream flow could maintain and enhance fisheries downstream of the diversion.

D. Will the project increase public fishing opportunity for wild fish and, if so, how?:

Access will not be part of this project at the diversion but improvements to the fishery would occur over a large area of the Musselshell River.

E. If the project requires maintenance, what is your time commitment to this project?:

Maintenance would be part of the DNRC and DMBWUA responsibilities.

F. What was the cause of habitat degradation in the area of this project and how will the project correct the cause?:

Installation of a structure that didn't consider fish passage in 1941. A rehabilitated structure will include a fishway and reduce unnecessary leakage into the diversion canal. The uncontrolled leakage into the canal amounts to approximately 3,000 acre-feet of water that could be left in the river.

G. What public benefits will be realized from this project?:

Improved fisheries in the mainstem Musselshell for wild brown trout and native minnow, sucker, and other fish species present. A recent survey 16 miles downstream of the diversion found brown trout present but in much lower density than the Selkirk Section. The project will also improve floater (canoe/kayak) passage through the site.

H. Will the project interfere with water or property rights of adjacent landowners? (explain):

No. An easement between MTDRNC/DMBWUA and the Winnecook Ranch exists to the Diversion and Canal. They are aware of the project and have no issues with the project. An additional 3,000 acre-feet of water may be kept in the river for other water users which would also benefit fish with resulting in-stream flow.

I. Will the project result in the development of commercial recreational use on the site?: (explain):

No.

J. Is this project associated with the reclamation of past mining activity?:

No.

Each approved project sponsor must enter into a written agreement with the Department specifying terms and duration of the project.

IV. AUTHORIZING STATEMENT

I (we) hereby declare that the information and all statements to this application are true, complete, and accurate to the best of my (our) knowledge and that the project or activity complies with rules of the Future Fisheries Improvement Program.

Applicant Signature: Mike Ruggles Date: 5/31/14

Sponsor (if applicable):

***Highlighted boxes will automatically expand.**

Mail To:

Montana Fish, Wildlife & Parks
Habitat Protection Bureau
PO Box 200701
Helena, MT 59620-0701

Incomplete or late applications will be returned to applicant.

Applications may be rejected if this form is modified.

*****Applications may be submitted at anytime, but must be received by the Future Fisheries Program office in Helena before December 1 and June 1 of each year to be considered for the subsequent funding period.*****